MONTHLY WEATHER MAP

METEOROLOGICAL SERVICE, DOMINION OF CANADA

JANUARY 1931

TEMPERATURE

Prevailing westerly winds continued to dominate the weather of Western Canada. While at intervals of about six days the temperature along the Arctic coast fell to approximately the normal January minimum of thirty to forty degrees below zero yet the resulting moderate cold waves affected principally the northeastern portion of the continent, from northern Manitoba through northern Ontario and Quebec to the Atlantic coast.

Mild southern fronts, accompanied by precipitation, affected the southern districts of the East, commencing on the fifth, eleventh, eighteenth and twenty-fourth. In addition the Atlantic Provinces on the eleventh, and Cape Breton only on the sixteenth, were affected by warm fronts from the Atlantic.

There was a very general excess over normal temperature. The maximum excess was twenty to twenty-five degrees in parts of Saskatchewan and Alberta. In part of northeastern Ontario, the St. Maurice and Saguenay regions of Quebec and in eastern New Brunswick temperatures were a little below normal.

PRECIPITATION

On the Pacific coast, northern Saskatchewan, northern Manitoba, locally in northern Ontario, parts of the Laurentian region of Quebec, in Nova Scotia and Prince Edward Island, the total precipitation was in excess of the normal amount. Over the greater portion of the Dominion precipitation was largely deficient.

BRITISH COLUMBIA

On the coast rainy weather was of almost daily occurrence. On Vancouver Island, except the extreme south, precipitation was fifteen to sixty per cent. in excess of normal. At the mouth of the Fraser the excess was thirty to thirty-five per cent. Higher upstream on the Fraser there was a deficiency of thirty per cent. Generally in the interior the deficiency was thirty to seventy per cent.

Temperatures were generally high for the season, and several points reported the warmest January on record. The excess ranged from five degrees in south Vancouver Island to twenty-five degrees in the northern interior. Very little snow fell even on the mountains of the interior.

ALBERTA, SASKATCHEWAN and MANITOBA

The month was extraordinarily mild and generally extremely dry. The excess over normal temperature was not generally so great as in January, 1919 and at some points not quite so great as in January, 1891, but at a few points in Saskatchewan and Manitoba a new record was created. Excess over normal temperature averaged eighteen degrees over the wheat regions with some areas reporting excess of more than twenty degrees. No precipitation or only a few flakes of snow occurred over considerable areas. The deficiency was generally about eighty per cent. but in northern parts of Saskatchewan and Manitoba there was an excess. No snow lay on the ground over a considerable area with wheel traffic encountering no difficulty.

ONTARIO

From the north shore of Lake Superior west to the Lake of the Woods and north to the Albany River this was one of the warmest Januaries on record. Since 1877 when observations began at Port Arthur only January 1906 and January 1919 have been so mild. January 1880, 1900, 1904, 1908, 1921, 1926 and 1928 were also very mild but not to the same extent. The excess in northwestern Ontario over normal temperature was six to thirteen degrees. In the Abitibi and Temiskaming region and in the Ottawa valley temperatures were slightly below normal locally while in southwestern Ontario there was an excess of one to five degrees.

The month was generally dry except in the vicinity of Port Arthur and in the Abitibi region. West of Lake Superior the deficiency was twenty to sixty per cent. of the normal precipitation. East of Lake Superior to the Ottawa valley, the deficiency was ten to sixty per cent. and in southwestern Ontario five to fifty per cent.

In the Abitibi region and locally on the north shore of Lake Superior snowfall was heavy, exceeding the normal by thirty per cent. or more.

QUEBEC

Along the River and to the south temperatures were a little above normal, but north of the River from Lake St. John to Lake Abitibi temperatures were generally a little below normal.

Precipitation was generally ten to twenty-five per cent. below normal in southern districts but in some northern districts there was an excess. In the upper Ottawa valley the deficiency was twenty to fifty per cent. or more.

ATLANTIC PROVINCES

Over the greater part of these provinces temperatures averaged one to three degrees above normal but in southeastern New Brunswick they averaged one to three degrees below normal.

Precipitation was irregularly distributed. In New Brunswick most northern and interior districts had a deficiency of five to thirty-five per cent. while on the north shore of the Bay of Fundy there were local excesses. In Nova Scotia there was an excess of ten to twenty per cent. in the southwest, (except for local deficiencies in the vicinity of the Basin of Minas and of Halifax) while in Prince Edward Island, Cape Breton and adjacent counties of Nova Scotia there was an excess of thirty to fifty per cent.

Cold weather prevailed in New Brunswick during the latter part of the month. Prince Edward Island had a deep snow cover throughout the month with thirty inches on the ground at the close. In New Brunswick the snow cover varied from ten to forty-five inches. In Nova Scotia the depth at the close varied from four to twenty-two inches.

HUDSON STRAIT

In the Strait the month was ten to fifteen degrees warmer than a normal January. On the west coast of Hudson Bay temperatures were two to four degrees above normal.

A. J. CONNOR.

SPECIAL REPORTS

NOTE—Column H is Highest Temperature; Column L is Lowest Temperature; Column P is Precipitation in inches; Column I denotes total of bright sunshine in hours during the month. Column Sg denotes depth of snow on ground in inches, where given.

BRITISH COLUMBIA

STATION	H	L	P	I	STATION	H	L	P	I	STATION	H	L	P	I
Victoria	56°	37°	4.7	54	New Westminster	62°	29°	11.1		Trail	46°	24°	2.4	
Goldstream Lake			12.4		Agassiz	59°	30°	5.1	48	Golden	45°	4°	1.2	
Sooke	58°	31°	8.7		White Rock	63°	31°	8.5		Cranbrook	51°	3°	0.2	
Port Alberni	56°	33°	18.2		Vernon	47°	18°	1.2	30	Glacier	35°	7°	5.9	
Duncan	53°	25°	6.2		Salmon Arm	47°	21°	2.0	30	Field	39°	6°	2.7	
Nanaimo	54°	31°	9.8	17	Kelowna	51°	24°	0.6		Kamloops	52°	20°	0.3	48
Courtenay			10.5		Penticton	47°	20°	0.3		Prince George	54°	2°	0.9	
Vancouver	58°	29°	11.2	28	Oliver	46°	22°	1.0	12	Prince Rupert	57°	33°	14.1	

ALBERTA, SASKATCHEWAN AND MANITOBA

STATION	H	L	P	I	Sg.	STATION	H	L	P	I	Sg.
Beaver Lodge	62°	-3°	0.3	91		Birtle	40°	-23°	0.2		4
Edmonton	55°	-10°	T	110		Treherne	40°	-15°	0.8		8
Calgary	60°	3°	0.1	188		Morris	40°	-18°			36
Medicine Hat	66°	-2°	T	106	0	Morden	41°	-13°	0.8	74	
Scott	45°	-10°	0.2	86		Moose Horn Bay	43°	-28°	0.8		
Battleford	48°	-6°	T		T	Flin Flon Mine	30°	-36°			
Prince Albert	50°	-20°	0.7		2	Rapid City	38°	-31°	0.4		
Swift Current	58°	-12°	0.1	111		Great Falls	35°	-20°	0.8		
Moose Jaw	57°	-15°	0.1	114		Hamiota	38°	-20°			
Qu'Appelle	50°	-25°	0.4	114		Shoal Lake	35°	-24°	0.8		
Le Pas	34°	-28°	1.5	99	15	Oak Bank	38°	-16°	0.7		18
Minnedosa	40°	-15°	0.2		3	Pinawa	37°	-23°	0.5		
Winnipeg	39°	-13°	0.3	59	7	Russell	40°	-26°			
Dauphin	45°	-15°	0.8			Sprague	34°	-21°	0.6		
Brandon	39°	-24°	0.4	83	6	Warren	40°	-20°	0.3		
Treesbank	42°	-21°	0.6		5	Waskada	40°	-21°	0.5		

ONTARIO

Atikokan	32°	-40°	1.2			Parry Sound	36°	-19°	3.9		42
Mine Centre	34°	-32°	0.8		14	Scotia Junction	34°	-28°	1.7		24
Ignace	30°	-38°	0.8			Beatrice	35°	-24°	2.5		24
Ingolf	32°	-27°	0.7			Barrie	41°	-13°	4.1		18
Kenora	32°	-19°	0.8			Walkerton	43°	-4°	2.4		24
Sioux Lookout	30°	-32°	0.7		12	Mount Forest	39°	-13°	2.9		16
Longlac	31°	-38°	0.9			Brucefield	40°	-2°	2.4		18
Port Arthur	34°	-20°	1.3		4	Lucknow	40°	-5°	1.5		
Quorn	29°	-40°	1.3		20	Southampton	40°	0°	2.7		18
Schreiber	32°	-24°	1.8		27	Stratford	40°	0°	3.1		10
Blind River	36°	-12°	1.1			London	43°	2°	3.5		7
Sault Ste. Marie	42°	-30°				Woodstock	41°	-4°	2.1	78	11
White River	32°	-35°	1.6		20	Paris	43°	-3°	2.1		8
Chapleau	29°	-30°	1.2			Alton	39°	-11°	4.1		7
Ruel	33°	-38°	0.4		21	Harrow	46°	3°	1.6	112	0
Cochrane	27°	-36°	1.6		20	Toronto	45°	0°	2.6	87	6
Haileybury	32°	-30°	0.8		13	Beeton	65°	-16°	1.8		9
Heaslip	29°	-36°	1.8			Bloomfield	55°	-25°	3.8		24
Iroquois Falls	26°	-40°	1.5			Queensboro'	37°	-30°	2.4		19
Kapuskasing	27°	-37°	1.8	58		Peterboro'	40°	-16°	1.9		8
New Liskeard	32°	-38°	1.4	59		Kingston	38°	-10°	1.4	97	24
Algonquin Park	33°	-31°	1.4			Brockville	40°	-17°	2.6		17
Madawaska	36°	-41°	2.3			Morrisburg	39°	-26°	2.3		18
Montreal River	34°	-37°	1.5			Ottawa	38°	-21°	2.1		28
North Bay	35°	-29°	1.8		19	Ottawa (Exp.Farm)	37°	-27°	2.2	92	22
Crystal Falls	36°	-38°	0.9			Renfrew	34°	-22°	2.4		
Gore Bay	34°	-17°	2.1			Pembroke	38°	-20°	2.1		15
Providence Bay	36°	-18°	3.4		18						

QUEBEC

STATION	H	L	P	I	Sg.
Cedars	38°	-17°	2.5		14
Macdonald College	38°	-19°	3.0		18
Montréal	38°	-7°	3.2	95	13
Farnham	36°	-37°	2.9	88	18
Brome	35°	-30°	3.0		19
Nicolet	37°	-19°	2.6		24
Sorel	36°	-26°	3.5		30
Thetford Mines	38°	-25°	2.4		
Lennoxville	37°	-31°	2.7	80	24
Sherbrooke	37°	-21°	2.8	79	17
Drummondville	33°	-23°	4.0		21
Beauceville	34°	-26°	3.6		42
Lake Mégantic	32°	-18°	4.2		55
Cap Rouge	30°	-16°	2.0	67	27
Québec	32°	-14°	3.5	94	30
St. Joachim	33°	-19°	1.7		15
Armagh	32°	-15°	2.6		
Tadoussac	27°	-15°	2.5		
Seven Falls	34°	-27°	2.8		
Ste. Anne de la Pocatiére	34°	-12°	2.1	98	2
La Malbaie	35°	-16°	3.0		
Roberval	37°	-20°	4.2		20
Albanel	24°	-26°	1.3	118	18
Manouan	30°	-22°	2.2		
Lake Kempt	27°	-41°	2.8		
La Tuque	28°	-28°	2.9		
Chute aux Galets	20°	-45°	2.8		
Lac Onatchiway	24°	-38°	2.1		
Chute à Murdock	33°	-30°	1.4		
Kenogami	25°	-31°	1.9		
La Loutre Rapids	29°	-31°	2.1		
Joliette	32°	-23°	1.7		11
Huberdeau	34°	-22°	2.5		32
Mont Laurier	33°	-30°	1.1		18
Maniwaki	32°	-26°	1.6		
St. Gabriel de Brandon	37°	-20°	2.5		18
Abitibi	28°	-36°	1.5		
La Ferme	27°	-43°	1.1	78	
Ville Marie	32°	-28°	1.2		10

ATLANTIC PROVINCES

Saint John	41°	-6°	4.4	131	5
Aroostook	32°	-29°	3.4		23
Bathurst	34°	-12°	2.3		36
Chatham	34°	-22°	2.4		24
Edmundston	31°	-19°	2.8		27
Fredericton	39°	-10°	3.0	129	40
Fredericton (Experimental Farm)	38°	-9°	3.4	119	34
Gagetown	41°	-12°	3.3		18
Grand Falls	32°	-24°	3.0		40
Harvey	37°	-16°	3.2		45
Moncton	42°	-14°	3.8		
Musquash	42°	-18°	3.0		12
McAdam Junction	38°	-20°	2.7		36
Rexton	38°	-20°	2.7		36
Sussex	45°	-14°	2.7		10
Woodstock	34°	-23°	2.6		38
Digby	47°	4°	3.5		4
Kentville	53°	-3°	3.7	87	
Liverpool	52°	0°	5.9		4
Nappan	44°	-11°	3.3	89	
Sydney	48°	-1°	6.9		21
Truro	41°	-11°	3.7		
Upper Stewiacke	54°	-12°	4.1		8
Wolfville	51°	-3°	3.9	93	3
Yarmouth	48°	7°	5.2		6
Charlottetown	46°	-6°	4.9		30
Charlottetown (Experimental Farm)	44°	-9°	4.6	102	

Port Nelson
Great Whale River
Big River
James Bay
Trout Lake
Belle Isle
N.W. River
Domino
Harrington Harbour
Cape Race
Sable I.
Hope
Moose Fort
Sioux Lookout
White River
Port Arthur
Lake Superior
Houghton
Marquette
Sault Ste Marie
Escanaba
Alpena
Lake Michigan
Green Bay
Ludington
Saginaw
Port Huron
Grand Haven
Grand Rapids
Detroit
Madison
Milwaukee
Chicago
Toledo
Cleveland
Erie
Ft. Wayne
Buffalo
Rochester
Syracuse
Oswego
Albany
Binghampton
Scranton
Pittsburg
Harrisburg
Philadelphia
New York
Boston
Concord
Northfield
Portland
New Haven
Block I.
Nantucket
Sudbury
Hailey bury
+4°
+8°
+12°
90°
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75°
70°
65°
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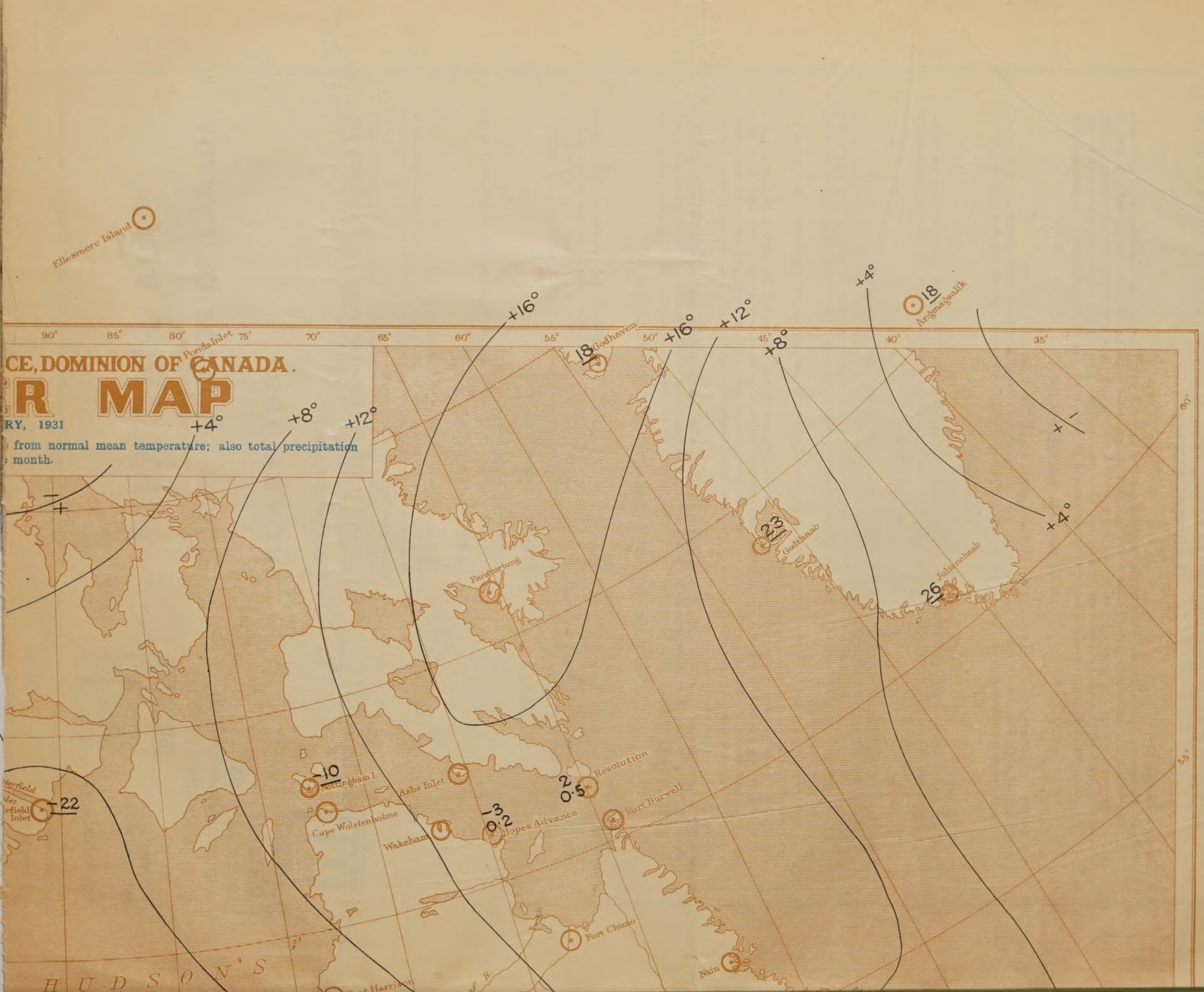
45°
40°


CE, DOMINION OF CANADA.
R MAP
RY, 1931
from normal mean temperature; also total precipitation
month.
Ellesmere Island
Ponds Inlet
Godhaven
Arsuk
Arsingagsalik
Pangnirtung
Godthaab
Julianehaab
Nottingham I.
Ashe Inlet
Resolution
Cape Wolstenholme
Wakeham
Hopes Advance
Port Burwell
Port Chimo
Nain
HUDSON'S
90°
85°
80°
75°
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65°
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55°
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+16°
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−
+
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−22
−3
0.2
2
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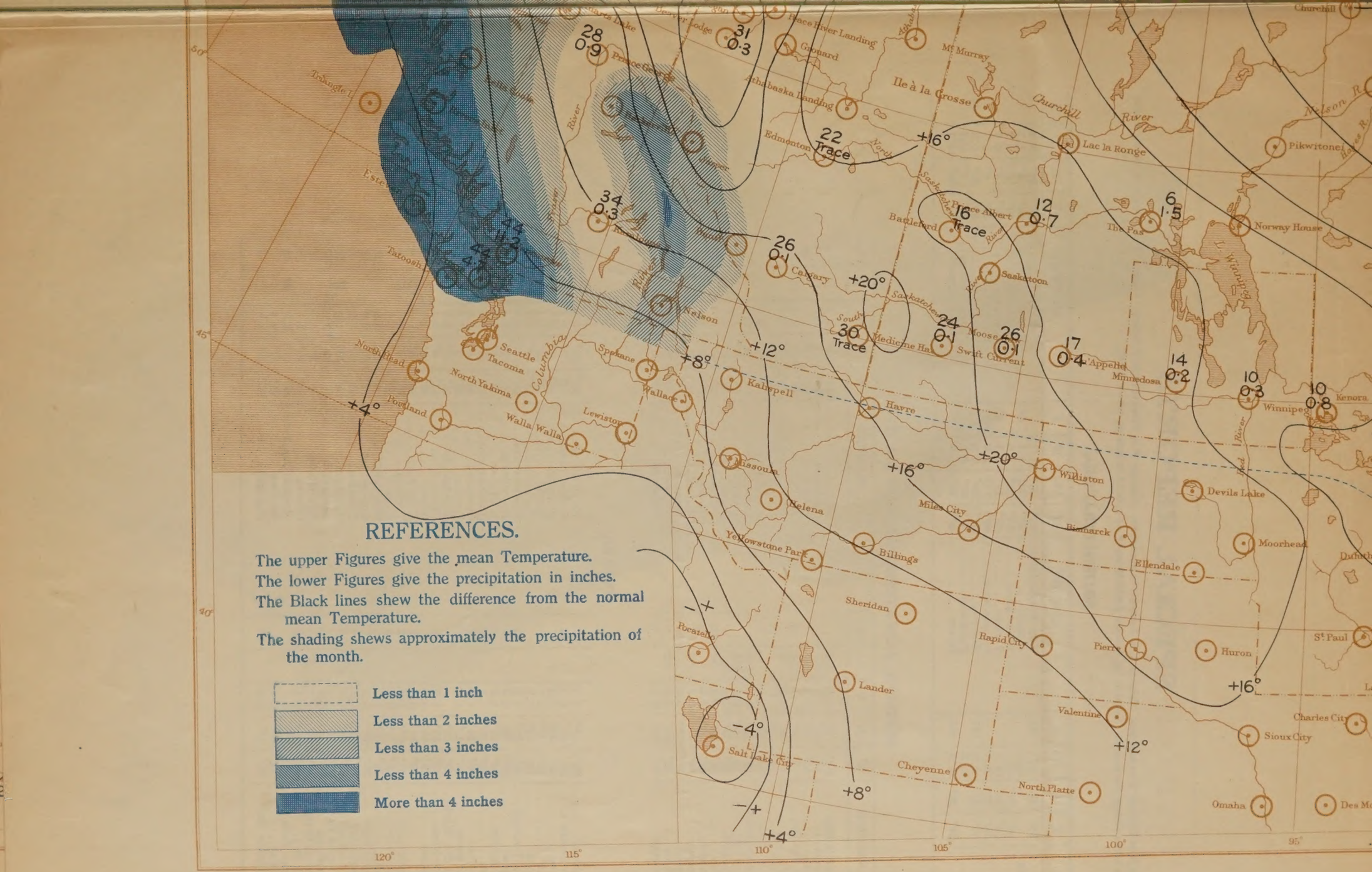
18
18
23
26


REFERENCES.
The upper Figures give the mean Temperature.
The lower Figures give the precipitation in inches.
The Black lines shew the difference from the normal mean Temperature.
The shading shews approximately the precipitation of the month.
Less than 1 inch
Less than 2 inches
Less than 3 inches
Less than 4 inches
More than 4 inches
28 0·9
31 0·3
22 Trace
+16°
34 0·3
16 Trace
12 0·7
6 1·5
26 0·1
+20°
24 0·1
26 0·1
17 0·4
14 0·2
10 0·3
10 0·8
30 Trace
+12°
+8°
+4°
+16°
+20°
−4°
−+
Edmonton
Calgary
Saskatoon
Swift Current
Medicine Hat
Battleford
Prince Albert
The Pas
Norway House
Lac la Ronge
Pikwitonei
Churchill
Ile à la Crosse
Athabaska Landing
Peace River Landing
Grouard
Mt Murray
Dunvegan
Prince George
Tatoosh
Seattle
Tacoma
North Yakima
Portland
Walla Walla
Lewiston
Spokane
Wallace
Kalispell
Kelson
Columbia
Fraser
Thompson
Fishing
Nechaco
Peace
Athabaska
Saskatchewan
Red River
Assiniboine
Minnedosa
Winnipeg
Kenora
Hayre
Missoula
Helena
Miles City
Billings
Yellowstone Park
Williston
Devils Lake
Bismarck
Moorhead
Ellendale
Sheridan
Rapid City
Pierre
Huron
St. Paul
Pocatello
Lander
Valentine
Charles City
Sioux City
Salt Lake City
Cheyenne
North Platte
Omaha
120°
115°
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105°
100°
95°
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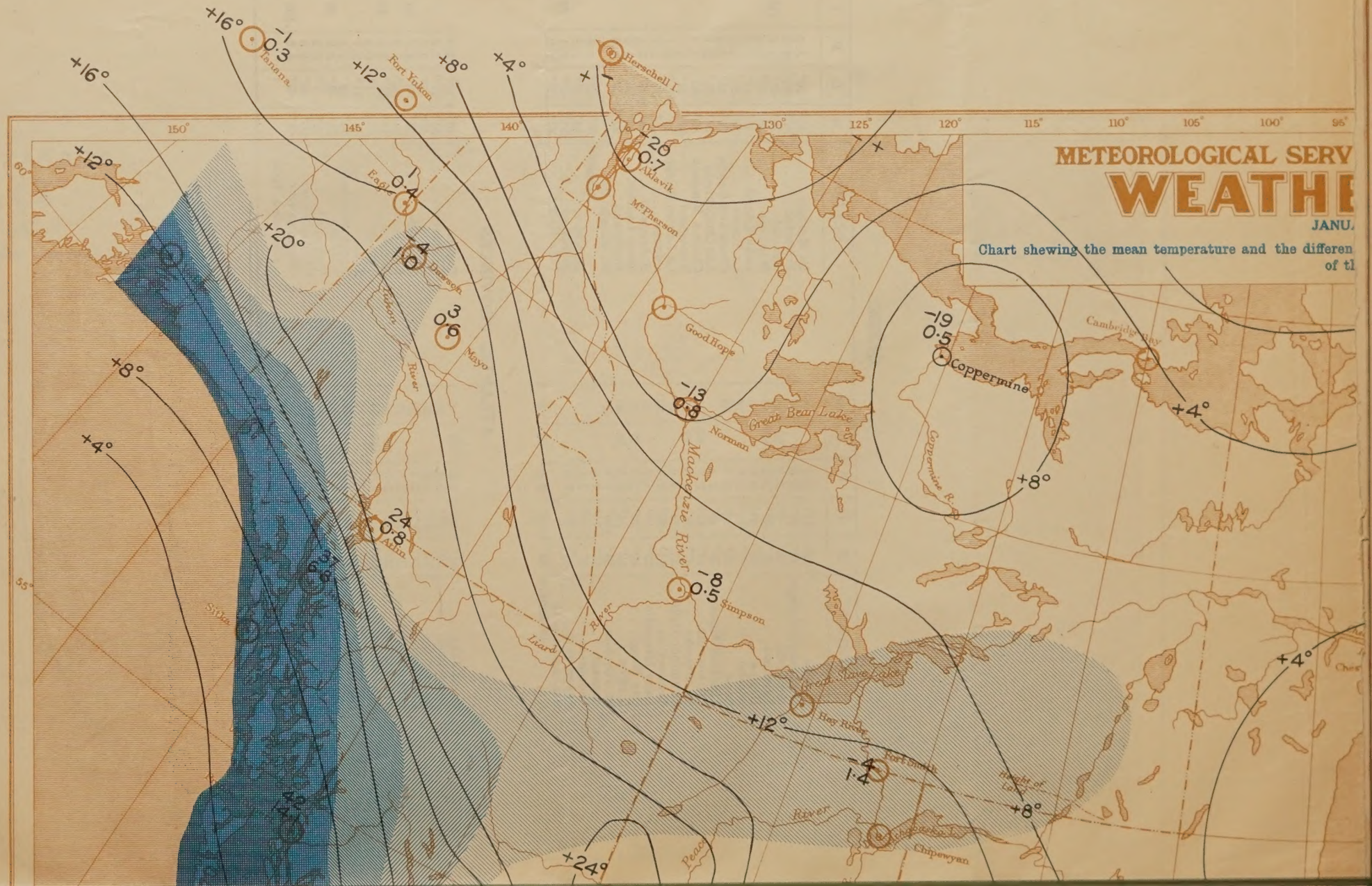
40°


METEOROLOGICAL SERV
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JANU.
Chart shewing the mean temperature and the differen
of tl
+16°
+12°
+8°
+4°
+20°
+24°
150°
145°
140°
130°
125°
120°
115°
110°
105°
100°
95°
60°
55°
Herschell I.
Aklavik
Fort Yukon
Eagle
Dawson
Mayo
Good Hope
Great Bear Lake
Norman
Mackenzie River
Coppermine
Cambridge Bay
Simpson
Liard
Hay River
Fort Smith
Peace River
Chipewyan
Slave River
Athabasca
Lake
-1
0·3
Fairbanks
-1
0·4
-4
1·0
3·6
0·6
-26
0·7
-19
0·5
-13
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3·7
0·6
4·2
1·7

LIBRARY
FEB
MEXICAN BUREAU